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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/866,502	05/25/2001	Frederick Robert Chang	SBC-0101	4455

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LAW OFFICE OF DALE B. HALLING, LLC
655 SOUTHPOINTE COURT, SUITE 100
COLORADO SPRINGS, CO 80906

EXAMINER

JACOBS, LASHONDA T

ART UNIT	PAPER NUMBER
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2157

DATE MAILED: 03/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/866,502

Applicant(s)

CHANG ET AL.

Examiner

LaShonda T. Jacobs

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on January 23, 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 11-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 36 is/are allowed.
- 6) ☒ Claim(s) 1-8 and 11-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Response to Amendment

This Office Action is in response to Applicant's Amendment/Request for Reconsideration filed on January 23, 2006. Claims 1-36 are still pending. Claims 1 and 25 have been amended. Claims 9 and 10 have been cancelled. Claim 36 is allowed. Claims 1-8 and 11-35 are presented for further examination.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3-5, 7-13, 15-17 and 25-31 35 U.S.C. 103(a) as being unpatentable over Scott et al (hereinafter, "Scott", U.S. Pub. No. 2002/0049760) in view Vigue et al (hereinafter, "Vigue" U.S. Pat. No. 6,983,326).

As per claim 1, Scott discloses a method for improving the reliability of peer-to-peer network downloads, comprising:

- receiving a list of servers that satisfy the search (paragraph 0045-0046);
- selecting at least one of the servers from the list of servers (paragraph 0045-0046);
- selecting one of a plurality of downloading systems based on a predetermined criteria (paragraph 0046); and

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- downloading a file using one of the plurality of downloading systems (paragraphs 0027 and 0050).

However, Scott does not explicitly disclose:

- initiating a broadcast search from a client on a peer-to-peer network.

Vigue a system and method for distributed function discovery in a peer-to-peer network environment including:

- initiating a broadcast search from a client on a peer-to-peer network (col. 2, lines 45-54 and col. 4, lines 46-56).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Scott by allowing the peers within a network to broadcast searches to each other in order to facilitate efficient use of bandwidth and resources.

As per claim 15, Scott discloses a method of improving the reliability of peer-to-peer network downloads, comprising the steps of:

- originating a search from a client on a peer-to-peer network (paragraph 0044);
- receiving a list of servers and a list of associated document names that satisfy the search query (paragraphs 0041 and 0046);
- selecting at least one of the servers from the list of servers (paragraph 0046);
- determining one of a plurality of downloading systems based on a predetermined criteria (paragraph 0046); and
- downloading a file (paragraphs 0027 and 0050).

However, Scott does not explicitly disclose:

- broadcasting a search query over the peer-to-peer network.

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Vigue a system and method for distributed function discovery in a peer-to-peer network environment including:

- broadcasting a search query over the peer-to-peer network (col. 2, lines 45-54 and col. 4, lines 46-56).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Scott by allowing the peers within a network to broadcast searches to each other in order to facilitate efficient use of bandwidth and resources.

As per claim **25**, Scott discloses a method of operating a peer-to-peer network comprising the steps of:

- receiving a list of peer servers that meet a search query (paragraph 0046); and
- selecting one of a plurality of downloading systems based on a predetermined criteria (paragraph 0046).
- downloading a file using the one of the plurality of downloading systems (paragraphs 0027 and 0050).

However, Scott does not explicitly disclose:

- initiating a broadcast search from a first peer to the peer-to-peer network.

Vigue a system and method for distributed function discovery in a peer-to-peer network environment including:

- initiating a broadcast search from a first peer to the peer-to-peer network (col. 2, lines 45-54 and col. 4, lines 46-56).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Scott by allowing the peers within a network to broadcast searches to each other in order to facilitate efficient use of bandwidth and resources.

As per claim 3, Scott discloses wherein step (d) further includes the step of:

- selecting a multiple concatenated download system (paragraphs 0027 and 0050; Scott discloses a peer downloading a file from a first server and the second server starts to download the file one byte greater than the amount of the file received from the first server. Therefore, Scott meets Applicants' definition of multiple concatenated downloading (see specification page 6, lines 16-20).

As per claim 4, Scott discloses wherein step (d) further includes the step of:

- selecting a serial concatenated download system (paragraphs 0027 and 0046, Scott discloses a peer choosing to downloading a file from a first server in the list of servers. Therefore, Scott meets Applicants' definition of serial concatenated downloading (see specification page 6, lines 5-7).

As per claim 5, Scott discloses wherein step (d) further includes the step of:

- determining a connection speed to the at least one of the servers (paragraph 0046).

As per claim 7, Scott discloses wherein step (a) further includes the steps of:

- entering a text string (paragraph 0070).

As per claim 8, Scott discloses wherein step (a) further includes the steps of:

- entering a unique key (paragraphs 0033 and 0044).
- transmitting a search query to a central server (paragraph 0044).

As per claim 11, Scott discloses wherein step (b) further includes the step of:

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- receiving a document name (paragraphs 0030 and 0045-0046).

As per claim 12, Scott discloses wherein step (b) further includes the step of:

- receiving a file size (paragraphs 0030 and 0045-0046).

As per claim 13, Scott discloses wherein step (b) further includes the step of:

- receiving a source node for a file (paragraph 0045-0046).

As per claim 16, Scott discloses wherein step (a) further includes the step of:

- entering a unique key that identifies the file (paragraphs 0038 and 0044).

As per claim 17, Scott discloses wherein step (c) further includes the step of:

- receiving a file size, a source node and a unique key (paragraphs 0030 and 0045-0046).

As per claim 26, Scott discloses wherein step (c) further includes the steps of:

- determining a connection speed to each of the peer servers on the list of peer servers (paragraph 0046);
- selecting a subset of the list of peer servers based on the connection speed (paragraph 0046).

As per claim 27, Scott discloses wherein step (c1) further includes the step of:

- receiving a test file from each of the servers on the list of servers (paragraphs 0044-0045).

As per claim 28, Scott discloses wherein step (c1) further includes the step of:

- determining an order of response receipt from each of the servers on the list of servers (paragraph 0045).

As per claim 29, Scott discloses wherein step (c1) further includes the step of:

- pinging each of the servers on the list of servers (paragraph 0046).

As per claim **30**, Scott discloses wherein the step (d) further includes the steps of:

- when an available bandwidth is less than a two times a connection speed, selecting a server with a fastest connection speed (paragraph 0046); and
- starting a download from the server with the fastest connection speed (paragraphs 0046 and 0050).

As per claim **31**, Scott discloses wherein the step (d) further includes the steps of:

- determining if the server with the fastest connection speed had an error before the file was downloaded (paragraphs 0046 and 0049);
- when the server with the fastest connection speed had an error before the file was downloaded, selecting a second server (paragraphs 0046 and 0049);
- determining a last byte received (paragraph 0050); and
- transmitting download starting from a next byte command to a second server.
(paragraph 0050).

3. Claim **2** and **32-35** are rejected under 35 U.S.C. 103(a) as being unpatentable over Scott in view of Vigue and in further view of Fanning et al (hereinafter, "Fanning", U.S. Pat. No. 6,742,023).

As per claim **2**, Scott in view of Vigue discloses the invention substantially as claims discussed above.

However, Scott in view of Vigue does not explicitly disclose wherein step (d) further includes the step of:

- selecting a multiple concurrent download system.

Fanning discloses a use-sensitive system for distribution of data files between users in a networked community of users comprising:

- selecting a multiple concurrent download system (col. 9, lines 5-14 and col. 11, lines 30-49, Fanning discloses a user that is allowed to configure and request concurrent downloading).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Scott in view of Vigue by including a concurrent downloading system that allows a user to simultaneously download files from a server in order to transfer files between users so that bandwidth costs of providing data are fairly and properly distributed across the network thereby providing users with a way to quickly and reliably locate data they wish to acquire.

As per claim 32, Scott discloses wherein the step (d) further includes the steps of:

- when an available bandwidth is not less than a two times a connection speed, selecting a plurality of servers from the list of servers (paragraph 0046); and

Fanning discloses a use-sensitive system for distribution of data files between users in a networked community of users comprising:

- starting a plurality of simultaneous downloads from the plurality of servers (col. 9, lines 5-14 and col. 11, lines 30-49, Fanning discloses a user that is allowed to configure and request concurrent downloading).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Scott by including a concurrent downloading system that allows a user to simultaneously download files from a server in order to transfer files between users so

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that bandwidth costs of providing data are fairly and properly distributed across the network thereby providing users with a way to quickly and reliably locate data they wish to acquire.

As per claim 33, Scott disclose the steps of:

- determining if the client has received a complete version of the file from one of the plurality of servers (paragraphs 0049); and
- when the client has received a complete version of the file from one of the plurality of servers, terminating a rest of the downloads (paragraph 0049).

As per claim 34, Scott in view of Vigue discloses the steps of:

- when an available bandwidth is not less than a two times a connection speed, selecting a plurality of servers from the list of servers (paragraph 0046); and

Fanning discloses a use-sensitive system for distribution of data files between users in a networked community of users comprising:

- starting a plurality of simultaneous offset downloads from the plurality of servers (col. 9, lines 5-14 and col. 11, lines 30-49, Fanning discloses a user that is allowed to configure and request concurrent downloading).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Scott in view of Vigue by including a concurrent downloading system that allows a user to simultaneously download files from a server in order to transfer files between users so that bandwidth costs of providing data are fairly and properly distributed across the network thereby providing users with a way to quickly and reliably locate data they wish to acquire.

As per claim 35, Scott disclose the step of:

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- when a complete file can be formed from the plurality of simultaneous offset downloads, constructing a complete file (paragraphs 0050 and 0054); and
- when a complete file can be formed from the plurality of simultaneous offset downloads, constructing a complete file (paragraphs 0050 and 0054).

4. Claims 6, 14 and 18-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scott in view of Vigue and in further view of Schleicher et al (hereinafter, "Schleicher", U.S. Pub. No. 2002/0138744).

As per claim 6, Scott in view of Vigue discloses the invention substantially as claims discussed above.

However, Scott in view of Vigue does not explicitly disclose wherein step (d) further includes the step of:

- comparing a connection speed to the at least one of the servers to an available bandwidth.

Schleicher discloses a method and system for providing a secure peer-to-peer file delivery network comprising:

- comparing a connection speed to the at least one of the servers to an available bandwidth (paragraphs 0040 and 0045-0046).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Scott in view Vigue by comparing the bandwidth speed of the closest client nodes containing the files in order to transfer the file from the closest client node directly to the subscribing node, thereby efficiently utilizing bandwidth.

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As per claim **14**, Scott in view Vigue discloses the invention substantially as claims discussed above.

However, Scott in view of Vigue does not explicitly disclose wherein step (b) further includes the step of:

- receiving an available bandwidth at a server.

Schleicher discloses a method and system for providing a secure peer-to-peer file delivery network comprising:

- receiving an available bandwidth at a server (paragraphs 0040 and 0045-0046).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Scott in view of Vigue by comparing the bandwidth speed of the closest client nodes containing the files in order to transfer the file from the closest client node directly to the subscribing node, thereby efficiently utilizing bandwidth.

As per claim **18**, Scott in view of Vigue discloses wherein step (d) further includes the step of:

- measuring a connection speed to a plurality of servers (paragraph 0046).

However, Scott in view of Vigue does not explicitly disclose:

- comparing the connection speed of the plurality of servers to an available bandwidth to the client.

Schleicher discloses a method and system for providing a secure peer-to-peer file delivery network comprising:

- comparing the connection speed of the plurality of servers to an available bandwidth to the client (paragraphs 0040 and 0045-0046).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Scott in view of Vigue by comparing the bandwidth speed of the closest client nodes containing the files in order to transfer the file from the closest client node directly to the subscribing node, thereby efficiently utilizing bandwidth.

As per claim 19, Scott in view of Vigue discloses wherein step (e) further includes the steps of:

- when the available bandwidth is less than the connection speed to two of the servers, selecting a serial concatenated download system (paragraphs 0027 and 0046, Scott discloses a peer choosing to downloading a file from a first server in the list of servers. Therefore, Scott meets Applicants' definition of serial concatenated downloading (see specification page 6, lines 5-7).

However, Scott in view of Vigue does not explicitly disclose:

- determining an available bandwidth is less than a connection speed to two of the servers.

Schleicher discloses a method and system for providing a secure peer-to-peer file delivery network comprising:

- determining an available bandwidth is less than a connection speed to two of the servers (paragraphs 0040 and 0045-0046).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Scott in view of Vigue by comparing the bandwidth speed of the closest client nodes containing the files in order to transfer the file from the closest client node directly to the subscribing node, thereby efficiently utilizing bandwidth.

As per claim **20**, Scott discloses the steps of:

- when the available bandwidth is not less than the connection speed to two of the servers, selecting a multiple concurrent download system (paragraphs 0027 and 0050; Scott discloses a peer downloading a file from a first server and the second server starts to download the file one byte greater than the amount of the file received from the first server. Therefore, Scott meets Applicants' definition of multiple concatenated downloading (see specification page 6, lines 16-20).

As per claim **21**, Scott discloses the steps of:

- when the available bandwidth is not less than the connection speed to two of the servers, selecting a multiple concatenated download system (paragraphs 0027 and 0050; Scott discloses a peer downloading a file from a first server and the second server starts to download the file one byte greater than the amount of the file received from the first server. Therefore, Scott meets Applicants' definition of multiple concatenated downloading (see specification page 6, lines 16-20).

As per claim **22**, Scott discloses wherein step (e2) further includes the steps of:

- starting a download from one of the list of servers (paragraphs 0049-0050);
- if the one of the list of servers is interrupted during the download, selecting a second of the list of server to start a download (paragraphs 0049-0050); and
- requesting the download to start at a next byte after a last received byte (paragraphs 0049-0050).

As per claim **23**, Scott discloses wherein step (e3) further includes the steps of:

- starting a download from at least two of the servers (paragraphs 0049-0050);

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- if any of the at least two of the servers finishes the download, terminating the download for any other servers (paragraphs 0049-0050).

As per claim 24, Scott discloses wherein step (e3) further includes the steps of:

- starting a first download at a first byte of the file for one of the at least two servers (paragraphs 0049-0050);
- starting a second download at a second byte of the file for a second of the at least two servers (paragraphs 0049-0050);
- determining when a complete file has been downloaded by combining the first download and the second download (paragraphs 0049-0050).

Allowable Subject Matter

6. Claim 36 is allowed.

Response to Arguments

7. Applicant's arguments with respect to claims 1-8 and 11-35 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LaShonda T. Jacobs whose telephone number is 571-272-4004. The examiner can normally be reached on 8:30 A.M.-5:00 P.M..


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 571-272-4001. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LaShonda T Jacobs
Examiner
Art Unit 2157

ltj
March 10, 2006


ARIO ETIENNE
PRIMARY EXAMINER